

## CLAIMS

1. A system for protection of a composite structure having a substrate and a barrier applied thereto during fabrication, including the steps of: introducing a fire resisting agent to the barrier; and attaching the barrier to the substrate before completing fabrication of the composite structure.

2. The system as defined in claim 1, wherein said step of introducing the fire resisting agent comprises: in-situ infusion of the agent into the barrier during said fabrication of the composite structure.

3. The system as defined in claim 2, further including the step of: applying a waterproofing cover skin to the barrier with the fire resisting agent infused therein before said attaching thereof to the substrate.

4. The system as defined in claim 3, wherein said attaching of the barrier is performed by bonding thereof to the substrate.

5. The system as defined in claim 4, wherein the barrier is an intumescent mat and the fire resisting agent is a phenolic resin.

6. The system as defined in claim 3, wherein the waterproofing cover skin is aluminum foil and said bonding involves application of a silicone adhesive between the barrier and the substrate.

1 7. The system as defined in claim 4, wherein the barrier is felt and the fire resisting agent is  
2 an intumescent coating.

1 8. The system as defined in claim 4, wherein the waterproofing cover skin is aluminum foil  
2 and said bonding involves application of a silicone adhesive between the barrier and the substrate.

1 9. The system as defined in claim 1, wherein the barrier is an intumescent mat and the fire  
2 resisting agent is a phenolic resin.

1 10. The system as defined in claim 1, further including the step of: applying a waterproofing  
2 cover skin to the barrier with the fire resisting agent infused therein before said attaching thereof  
3 to the substrate.

1 11. The system as defined in claim 8, wherein the waterproofing cover skin is aluminum foil  
2 and said bonding involves application of a silicone adhesive between the barrier and the substrate.

1 12. The system as defined in claim 1, wherein said attaching of the barrier is performed by  
2 bonding thereof to the substrate by application of an adhesive between the barrier and the  
3 substrate.

1 13. The system as defined in claim 1, wherein said attaching of the barrier is effected in  
2 response to said introducing of the fire resisting agent by infusion into the barrier during  
3 formation of the substrate.

- 1 14. The system as defined in claim 13, wherein said substrate is formed as a solid layer  
2 underlying the barrier attached thereto.